8 Framework support systems

- Bracket Solution

- Bracket Solution light

- permissible span of profiles

- Details

- Technical subject to modifications -
SystemOne - bracket solution
Technical documentation

SystemOne
Efficient framework solutions
SystemOne - bracket solution

Spatial view (illustration of parts)

fischer frame fixing
S 10 R / FUR 10
respec. fischer
steel anchor
Ø 10 / M 10

1. FZP - undercut anchor
M6 / M8

2. natural stone slab

3. 8

4. 7

5. 5

6. 6
SystemOne - bracket solution

Carrying profiles (Aluminium AlMg0.7Si ENAW6063 T66)

1. Vertical profiles (profile length 5.80 m)

<table>
<thead>
<tr>
<th>b (mm)</th>
<th>h (mm)</th>
<th>t (mm)</th>
<th>Iₓ (cm⁴)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>25</td>
<td>2</td>
<td>3,0</td>
</tr>
<tr>
<td>50</td>
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2. Horizontal profile (profile length 5.80 m)

Iₓ = 16.5 cm⁴
Iᵧ = 5.6 cm⁴
SystemOne - bracket solution

Connecting elements (Aluminium)

3 Fix point holder

4 Sliding point holder

All holders are available in

- c = 30 mm;
- c = 68 mm;
- c = 93 mm

5 Adjustable bracket with adjustment screw

6 Sliding bracket

hexagon headed screw M6 / A2

7 Fixit (plastic)

8 Profile guidance
SystemOne - bracket solution

9 stripe-holder
for fixing small stripes of natural stone (height ≤ 250mm)

stripeholder
+2 setting screws
+2 lock nuts

[Dimensions in mm]
SystemOne - bracket solution

SystemOne design example with reveals
SystemOne - bracket solution

Reveal angles (Aluminium)

10 reveal angle LW50, angle of 90°

- reveal angle 90°
- spike washer A2
- nut A2

+ 2x (FZP-anchor selected according to panel thickness and material)

11 reveal angle LW Flex, adjustable angle 82° – 103°

- reveal angle (2 parts)
- spike washer A2
- nut A2

+ 2x (FZP-anchor selected according to panel thickness and material)
SystemOne - bracket solution

Example with wallholder c=68mm, panel thickness 30mm and vertical profile 50 / 50 / 2 mm
SystemOne - bracket solution

Example with wallholder c=68mm, panel thickness 20mm with vertical profile 80 / 50 / 2 mm
SystemOne - bracket solution

Example with wallholder c=93mm, panel thickness 20mm
with vertical profile 100 / 50 / 2 mm

[Dimensions in mm]
SystemOne - bracket solution

Example with wallholder c=93mm, panel thickness 20mm and vertical profile 120 / 50 / 3 mm
SystemOne - bracket solution

Installation measures

±6mm
(panel adjustment by adjustment screw)
SystemOne - bracket solution light
Technical documentation

SystemOne
Efficient framework solutions
SystemOne - bracket solution light

Spatial view (illustration of parts)

fischer frame fixing
S 10 R / FUR 10
respec. fischer steel anchor
Ø 10 / M 10

FZP - undercut anchor
for natural stone, ceramic, HPL, fibre cement

natural stone slab, ceramic tile, HPL panel
SystemOne - bracket solution light

Carrying profiles (Aluminium AlMg0,7Si ENAW6063 T66)

1. Vertical profiles (profile length 5,80 m)

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2. Horizontal profile light (profile length 5,80 m)

$I_x = 12,2$ cm$^4$

$I_y = 1,5$ cm$^4$
SystemOne - bracket solution light

Connecting elements (Aluminium)

① Fix point holder

② Adjustable bracket with adjustment screw

③ Sliding point holder

④ Sliding bracket

⑤ Fixit (plastic)

⑥ Profile guidance

All holders are available in:
- \( c = 30 \text{ mm} \)
- \( c = 68 \text{ mm} \)
- \( c = 93 \text{ mm} \)
SystemOne - bracket solution light

Example with wallholder c=68mm, panel thickness 20mm and vertical profile 50 / 50 / 2 mm

[ Dimensions in mm ]
SystemOne - bracket solution light

Example with wallholder c=30mm, ceramic panel thickness 11mm with vertical profile 50 / 25 / 2 mm
SystemOne - bracket solution light

Example with wallholder c=30mm, HPL panel thickness 8mm with vertical profile 50 / 25 / 2 mm
SystemOne - bracket solution light

Installation measures

adjustment screw

±6mm
(panel adjustment by adjustment screw)

24

64

19

25
Bracket-solution

permissible span $l$ of horizontal profile in dependence of the panel height

![Graph showing the permissible span $l$ of horizontal profile in dependence of the panel height.](image)

- limit for 2000 N/m² wind
- limit for 3000 N/m² wind
- limit for 4000 N/m² wind

**span $l$ of horizontal profile (m)**

**panel height (m)**
Bracket-solution

Horizontal profile projection over vertical profile

\[ a_{\text{max}} = \frac{142500 \text{[N]}}{F \text{[N]}} \text{[mm]} \leq 300 \text{mm} \]

Example:

panel: 1.2m x 1m, windload 2000 \( \frac{\text{N}}{\text{m}^2} \)

\[ \Rightarrow 2400 \text{ N per Panel : 4 per anchor} \]
\[ = 600 \text{ N per bracket / anchor} \]

\[ a_{\text{max}} = \frac{142500}{600} = 237.5 \text{mm} \leq 300 \text{mm} \]

max. Distance = 237mm
Bracket-solution

permissible span of vertical profile

a) Vertical span of vertical profile

b) Horizontal span of vertical profile

vertical profiles (mm):
A = 50 x 50 x 2
B = 50 x 80 x 2
C = 50 x 120 x 3

Aluminium F25, permissible bending stress of 115 N/mm²
Bracket-solution

permissible span of vertical profile

a) Vertical span of vertical profile

b) Horizontal span of vertical profile

vertical profiles (mm):

A = 50 x 50 x 2
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Aluminium F25, permissible bending stress of 115 N/mm²